



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,145	07/15/2003	John L. Broughton	84697 3015 PDG	6076
20736	7590	01/19/2005	EXAMINER	
MANELLI DENISON & SELTER			CHIESA, RICHARD L	
2000 M STREET NW SUITE 700				
WASHINGTON, DC 20036-3307			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

1D

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/619,145	BROUGHTON, JOHN L.
	<b>Examiner</b>	<b>Art Unit</b>
	Richard L. Chiesa	1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____.   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

2. Figures 1-4 should apparently be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

Art Unit: 1724

3. The abstract of the disclosure is objected to because the expression "(Figures 3 and 4)" at the end of the abstract should apparently be deleted. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 102/103***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6, 15, and 16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kennedy et al. Kennedy et al (note Figures 1, 2) show a bleed for a fluid system having flow paths of both high and low resistance, a converging tangential port 9, axial port 7, and a cylindrical chamber 5 (note page 1, lines 5-109) as claimed (35 USC 102b). It would appear that Kennedy et al may not explicitly refer to the fluid system as a vent. However, Kennedy et al do disclose that the fluid system may be used as

Art Unit: 1724

a bleed (note page 1, lines 21-29) and certainly it is inherent or at least would have been readily obvious to one of ordinary skill in the art (35 USC 103a) that the Kennedy et al bleed apparatus must "vent" the flowline as the fluid sample is taken.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al in view of Lindberg. Kennedy et al, as described above in paragraph 6, disclose a fluid system vent substantially as claimed. However, Kennedy et al may not explicitly show the use of a convergent-divergent tangential port. In any case, Lindberg (note Figures 1-6) teaches the well-known use of a convergent-divergent tangential port 49 in a vent apparatus for the purpose of ensuring optimum fluid velocity (note Abstract and col. 3, line 30 to col. 4, line 61). Consequently, it would have been obvious to one having ordinary skill in the art to employ a convergent-divergent tangential port in the Kennedy et al vent system in order to facilitate creation of efficient flow velocity conditions as taught by Lindberg.

8. Claims 8-12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al in view of Walker. Kennedy et al, as described above in paragraph 6, disclose a fluid system vent substantially as claimed. It would appear that Kennedy et al may not disclose the use of an annular wall, an axially extended chamber, and separation of a lubricant from a gas turbine engine fluid. However, Walker (note Figures 1-4, ref. num. 14, 20, and col. 5, lines 39-56) teaches all of these well-known expedients in a vent apparatus for the purpose of eliminating buildup of sludge and other contaminants (note col. 1, lines 15-24) and for this same reason it

Art Unit: 1724

would have been obvious to one of ordinary skill in the art to employ these expedients in the Kennedy et al fluid vent system.

9. Claims 13, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al in view of Smith. Kennedy et al, as described above in paragraph 6, disclose a fluid vent system substantially as claimed. Apparently, Kennedy et al may not disclose a gas turbine engine bearing chamber in the vent apparatus. In any case, Smith (note Figures 1-5, and page 1, lines 4-128) teaches the well-known use of a gas turbine engine bearing chamber in a fluid vent system for the purpose of ensuring efficient oil flow and for this same reason it would have been obvious to one of ordinary skill in the art to employ such an expedient in the Kennedy et al vent apparatus.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references have been cited as art of interest to show centrifugal separators.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Chiesa whose telephone number is (571) 272-1154.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane S. Smith, can be reached at (571) 272-1166.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is (571) 272-0987.

Facsimile correspondence must be transmitted through (703) 872-9306.

Art Unit: 1724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard L. Chiesa

January 14, 2005

*Richard L. Chiesa*

RICHARD L. CHIESA  
PRIMARY EXAMINER  
ART UNIT 1724

*Jan. 14, 2005*